Application No. 09/540,843 Filed: March 23, 2000

REMARKS

I. Patentability Arguments

A. The Objections Should Be Withdrawn

Claims 71 and 93 were objected to by the Examiner because of claims' incorrect status identifiers. The status of each of the claims is corrected with this response. Therefore, the objections may be properly withdrawn and withdrawal is requested.

B. The Rejections Under 35 U.S.C. §112, Second Paragraph, Should Be Withdrawn

The Examiner rejected claims 52, 58 and 69 under 35 U.S.C. § 112, second paragraph, as allegedly failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. The applicants disagree with the rejections but nevertheless have amended the claims to expedite prosecution.

Applicants amend claims 52, 58 and 59 to recite "oligonucleotide" instead of "oligonucleotides." The applicants submit submits that the amended claims satisfy requirements of 35 U.S.C. § 112, second paragraph, and therefore, the rejection under 35 U.S.C. 112, second paragraph, should be withdrawn, and applicants respectfully request the withdrawal.

C. The Rejections Under 35 U.S.C. § 102(b) Should Be Withdrawn

At page 4 of the Office Action, the Examiner rejected claim 51 under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 5,583,016 to Villeponteau (Villeponteau).

The applicants respectfully submit that Villeponteau cannot anticipate the instant invention because it does not explicitly recite each and every element of the presently claimed invention.

Specifically, claim 51 of the instant invention teaches compositions with an oligonucleotide having a sequence consisting SEQ ID NO: 5 and a physiologically acceptable carrier. At page 11 of the instant specification, in line 2, Applicants disclose that SEQ ID NO: 5 corresponds to sequence GTTAGGGTTAG.

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At page 4 of the Office Action, the Examiner alleges that SEQ ID NO: 2 of Villeponteau is 100% identical to SEQ ID NO: 5 of the instant invention. SEQ ID NO: 2 of Villeponteau is RNA sequence CUAACCCUAAC. At lines 43 to 47 of column 4, Villeponteau also teaches that "the [RNA] sequence shown also shows the sequence of the cDNA, in which the ribonucleotides are replaced by deoxyribonucleotides." However, uridine would also have to be replaced by thymidine. The replacement will result in the following sequence: CTAACCCTAAC. Thus, Villeponteau teaches two sequences either the RNA sequence CUAACCCUAAC or the DNA sequence CTAACCCTAAC. Thus, in contrast to the Examiner's assertion, the DNA sequence of Villeponteau (CTAACCCTAAC) is not 100% identical to instant SEQ ID NO: 5 (GTTAGGGTTAG) and therefore cannot properly anticipate SEQ ID NO:5. Furthermore, the applicants submit that absent an explicit disclosure of the allegedly anticipating sequence, the reference cannot properly anticipate the present invention.

In summary, since Villeponteau does not teach an oligonucleotide identical to SEQ ID NO: 5 of the instant specification, it cannot anticipate the instant invention and, therefore, the rejection under 35 U.S.C. 102(b) should be withdrawn and withdrawal is respectfully requested.

At page 4 of the Office Action, the Examiner rejected claim 106 of the instant specification as allegedly been anticipated under 35 U.S.C. 102(b) by U.S. Patent No. 5,686,306 to West (West). The rejection is moot because claim 106 has been canceled.

D. The Rejections Under 35 U.S.C. § 103 Should Be Withdrawn

At page 5 of the Office action, the Examiner rejected claims 51 and 52 under 35 U.S.C. 103 as allegedly being obvious over Villeponteau taken with U.S. Patent No. 6,020,138 to Akhavan-Tafti (Akhavan-Tafti).

As discussed above, Villeponteau does not teach the oligonucleotide sequence claimed in the instant invention as SEQ ID NO: 5. and Akhavan-Tafti does nothing to overcome that failure. The Examiner characterized Akhavan-Tafti as teaching synthesizing oligonucleotides having a 5' phosphate and that such oligonucleotides can be simultaneously ligated onto a template bound primer and also teaches uses for such molecules. It also teaches oligonucleotides having a phosphodiester backbone. However, neither Akhavan-Tafti nor Villeponteau provides any

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motivation to prepare a single unligated oligonucleotide of the recited sequence having a 5' phosphate but rather suggests a number of oligonucleotides ligated via the 5' phosphate.

Since Villeponteau in combination with Akhavan-Tafti fails to teach or suggest the presently claimed sequence, the rejections under 35 U.S.C. § 103 should be withdrawn and applicants respectfully request the withdrawal.

At page 7 of the Office Action, the Examiner rejected claims 106 and 107 under 35 U.S.C. § 103 as being obvious over West when taken in combination with Akhavan-Tafti. The rejection is most because claims 106 and 107 are canceled.

Conclusion

Applicants respectfully submits that the claims are in condition for allowance and early notification thereof is requested. If in the interest of expediting prosecution, the Examiner has questions or comments he is invited to telephone the undersigned at the indicated telephone number.

Respectfully submitted,

HOWREY SIMON ARNOLD & WHITE, LLP

By:

David W. Clough, Ph.D. Registration No.: 36,107

Dated: December 9, 2004 321 N. Clark Street, Suite 3400

Chicago, IL 60610

Telephone: (312) 595-1408

Fax: (312) 595-2250

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